Microprocessors and the Education Market

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Technological Occupational Challenge, Social Transformation and Educational Response: International Yearbook of Education, 1985 by Edmund King; Paris: International Bureau of Education, Unesco, 1986.

THE educational planner looks at the immediate future with total acceptance of the 'givens' supplied to him. He neither questions nor encourages others to question the givens. For instance, the Indian planner does not consider a comparison between Asiad and play facilities in primary schools a valid exercise. Similarly, the American or European educational planner does not ask nor does he tell others where his government finds money for further expansion of the nuclear war machinery. He sees his role as that of telling the world how best to cope with the emerging shape of things. Unlike the educational planner, the military planner does not *cope* with given trends or priorities; he creates them and leaves it for others to cope.

This volume of Unesco's Internal Yearbook tells us how best education could cope with the world that microprocessors, unemployment, and cultural chaos will shape in the years to come. The volume has been prepared by the senior British educationist, Edmund King, with the help of the national reports presented at the 39th session of the International Conference of Education. The theme of the conference was "universalisation and renewal of primary education in the perspective of an appropriate introduction to science and technology". However, the focus of many contributions was rather different, and the present volume develops this other focus—on young adults and the occupational problems they will face due to technological change. King justifies this shift of focus by arguing that "whatever is achieved during the early stages of formal education depends for its justification upon a life-time of continued reappraisal in a rapidly changing world" (p 17). This argument alone should suffice to warn us how deeply is contemporary educational planning rooted in the old utilitarian political thought and the market model of human society.

The main plea made in this volume is that the new, microprocessor-based technology cannot be accommodated in the traditional structures and content of education. King builds on the argument we have been hearing for a few years now that the microprocessor will transform the world created by the industrial revolution. Production and consumption processes will change to such an extent that the institutions and ethics we have so far associated with the industrial mode of production will become irrelevant. Storage, retrieval, and movement of knowledge *(sic* information) will become a major preoccupation of society, and these processes will radically change our concepts of institutional and social organisation. Old types of employment will vanish, leisure will increase and new kinds of work will be born and recognised. The notion of a settled career will become obsolete. Flexibility, work-sharing, and coping with uncertainty will be valued. Right to work and a stable career have formed the basis of the modern structure *of* education. The microprocessor will erode this basis. In the world it will dominate, we are told, jobs will be short-lived since the skills and knowledge associated with jobs will frequently change. To cope with rapid shifts in demanded skills and knowledge, schools will require flexible admission and exit patterns, constant change in curricula, and, of course, computers in classrooms. King calls this 'preparedness for change' and 'education for uncertainty'. He claims that most governments have already recognised the implications of the microprocessor for education along these lines. If they still choose to do nothing, the risk that awaits them is that of finding their education systems bypassed by other agencies, such as the media and business.

BETWEEN POETRY AND THREAT

Thus the plea for educational change is sandwiched between poetry and threat. The poetry consists of phrases like 'dawn industries', 'young adult eyes seeking the horizon', 'the moving interface between learning and working', and, to top it all, 'the evolving judgment of those who learn, collectively and individually'. Much of this poetic idiom has its background in bourgeois humanist educational philosophies. It is they who created the concept of the individual child, and associated meaningful work with learning. There has been a perpetual conflict between these philosophies and the market model of human society. It is hardly possible to use the bourgeois humanist phraseology with credibility without acknowledging the conflict. But this is what King does, as indeed all enthusiasts of the educa^tional possibilities of the microprocessors do; and there is little wonder that the poetry part of his argument sounds so hollow. The other part namely the threat of educational institutions becoming redundant has a matching hollow ring to it. If schools and colleges are so easy to replace, why worry about reforming them? As far as the media are concerned, the boasts made by television visionaries in the sixties have subsided today. Whether business houses owning computer-based training facilities will fare any better, in substituting traditional institutions of learning should be clear within about twenty years.

The incompatibility of a microprocessor-based pedagogy with modern concepts of learning and the child goes deeper. Computer salesmen promise that their machine will do all that children's literature, play equipment, and affectionate teaching can do and faster. It is a pity that after nearly a decade of this propaganda, they can only quote studies reported in third rate journals many of which are subsidised by the computer industry itself. The more respectable voces in educational theory continue to suspect the usefulness of the new machine, hi America, no more than five per cent of the available software has been found to be of a calibre comparable to decent textbooks; the rest is basically trash. In several countries, the microprocessor industry has tried offering big subsidies to the school clientele, but the limits have already been reached. The British company, Acorn, got British government aid to subsidise its outgoing school model's sale in Indian schools. Such tactics are going to keep this or that company afloat for some time but the fact remains that the big dream that computer manufacturers had seen has started evaporating.

NAIVETY OR SALESMANSHIP?

This, however, is not true of the dream of transforming the world with the help of the microprocessor. The uses of the microprocessor are undoubtedly many, and those who own the means of modern technological production do not seem to know which uses are going to prove most conducive to their dominance in future. Resistance to the chip is rising among worker populations of the developed countries at the same pace as the increase in chip-based automation. All that the chip-business and its supporters have so far been able to do about the resistance is to suppress news of it. This is well in line with their general character. Have not they all along hidden the fact from public view that the marvellous precision and versatility of their magic machines' are the result of minor adjustments made to equipment that guide atomic missiles and monitor enemy movements? Preparation for war needs constant subsidy, which the state provides by cutting back on welfare and which corporate capital gains by expanding on the peace market, such as the market in schools, homes, and offices. To gain more profit, for more research for more killing, the cruder

jobs related to chip manufacturing are transferred to the third world. Women in south-east Asia can be made to lose their eyesight working on microchip circuits round the clock. All that women in America and Europe will suffer is headache and occasional birth of a deformed baby. Such inconvenient happenings need not threaten the industry simply because the inexorable laws of scientific verification will let decades elapse before any connections are established. Yet, there is evidence of worker resistance reaching annoying levels in many corners. Decline of peace markets is even more evident, and many computer giants have begun to get the uneasy feeling that they had all got it wrong somewhere.

These aspects of technological change King ignores, and perhaps justifiably so. Don't you ignore setbacks if you are out to spread the word of revolution? But what still shocks me is the theoretical pradigm King chooses to work with. Incredible though it sounds, but the Yearbook does openly ground itself in W W Rostow's obsolete thesis of the stages of economic growth. According to this thesis, the developing countries will some day become like the developed. It can only be a deep faith in Rostow's outmoded theory that permits King to make a statement like this: "If the Indian national telephone system has an international dialling facility, this could mean a potential linkage for the Indian villagers with anywhere in the world." How does one interpret this kind of prophetic thought? Often one sees it reflected in the speeches and writings of our own progressive hackers who find any criticism of any technology a sure sign of abhorrent Luddism. One can dismiss such rosy visions of the Indian villager's future as evidence of uninformed, uneducable, naive thinking. The alternative is to see it as a sales device, for after all, styles of expression do flow from the West to Indian advertising, ministries, institutes, and media. Although King throws in the 'developing countries' here and there in his analysis, there is little evidence to say that he recognises the difference between the problems that these countries face and those that have now beset the rich countries. I suspect that King, like Rostow, sees the first and the third worlds' problems on a continuum. For us, as much as for the West King's message is: alter the structures, content, and style of education so that it accommodates the technological and economic implications of the microprocessor. Since the idea of long-term careers will become obsolete, socialise the youth to accept flexible careers, train them to accept unemployment and uncertainty. Since the new technology is destined to pervade all walks of life, familiarise children with its magic early. And so on. In India, we can translate the message as Saying: Forget about your priorities, for it is too late to pursue them anyway; join the bandwagon. This message will be religiously read and rebroadcast, indeed has already

been, through other documents of a similar nature, by our councils and institutes of educational research and planning. And this is just one pernicious possibility arising out of the Yearbook.

Leaving aside its social theory, King's argumept looks rather poor even if seen purely in terms of educational theory. The basic point he makes is that schools now onwards ought to prepare children for acceptance of uncertainty in their work life. This plea, if taken seriously, will mean a paradigmatic crisis in the concept of socialisation on which much of modern institutionalised education is based. Yes, the silly slogans of life-long learning, and leisure education, intended to hide frequent unemployability, have been around for two decades, but the thrust this time is bolder. Can children be socialised for uncertainty? In one sense, we are already doing so, by running schools that work erratically, and non-formal centres that are expected to be schedule-free. More seriously and globally speaking, child-rearing and educational care have so far rested on the assumption that even under grave crisis children ought to grow up feeling that there is some certainty in life. If King really means that the opposite assumption can just as well inform sound educational practice, the least he can do is to acknowledge the seriousness of his preferenceand the implications it might have for educational research and discourse. Without such an acknowledgement, he seems merely to use a catchphrase. Such catchphrases are popular among people who see, or care to look for, no other course open to the world except the one on which it seems set. Those who see a nuclear holocaust as inevitable make a similar plea for adjustment to horror and nightmares. But those like King who believe in a microprocessor-based revolution swamping the world are going a step further. They are asking for positive and sustained action on the part of teachers to prepare children for unemployment, deskilling, and frustration.

Rammohun Roy: A Journalistic Biography

Bhabatosh Datta

Rammohun Roy: A Biographical Inquiry into the Making of Modern India by Iqbal Singh, Volumes II and III (combined): The Middle and the Last Phase; Asia Publishing House, Bombay, 1987; pages 611, Rs 250.

IQBAL SINGH published in 1958 the first volume of his biography of Rammohun Roy covering the first decades of Roy's life, from 1772 (or 1774) to around 1814. This first volume was reprinted in 1983 with the addition of a few pages of appendix notes. Now come the second and third volumes combined under one cover, carrying the story upto the Raja's death in 1833. The publishers' blurb describes Iqbal Singh as a "journalist and author" and the book is a very good example of a journalistic biography of a great Indian. The subtitle, "Inquiry into the Making of Modern India", is not fully justified by the treatment, but the author has produced an eminently readable book, in which the private life of Roy gets as much importance as his public activities.

In his first volume, he had cast doubts on the stories about Roy's ancestry and about what happened during the time he was supposed to have been travelling in Tibet. But Iqbal Singh does not fail to bring out the greatness which blossomed in the early years ind became fully formed in the last decade and a half of his life. When he came to settle in Calcutta in 1813, he was already a rich man and he increased his income by lending money—mostly to Europeans. He was easily accepted in the Calcutta society and soon became an important figure in all public activities. He created enemies also—

particularly because of his unitarian religious belief, which also created an estrangement between him and his parents. Iqbal Singh, as a good biographer, puts this estrangement into the proper perspective and discounts many legends that had grown around it.

The three most important activities of Rammohun after his settling in Calcutta were the foundation of the Hindu College, the move for prohibition of *suttee* and the presentation of his economic views to the Parliamentary Select Committee in England immediately before his death. Iqbal Singh however gives very much importance to the details of Rammohun's personal life (including some eight pages on the Raja Ram enigma), making the story live, but does not fully succeed in showing Roy's role in the making of modern India. Justice Edward Hyde East, David Hare and Rammohun were among the initiators of the idea of starting a college to give education in western science and literature, long before Macaulay's despatch of 1835 gave formal approval to the Anglicist' view. Among the strong supporters of the idea of the new college were the main leaders of the Calcutta society, but as they differed from Roy in the matter of religious beliefs and social customs, Roy and the European members of the active group decided to stand out. Even today Presidency College, the successor of